

DATA DICTIONARY FOR ARIZONA STATE HIGHWAY SYSTEM K D AND T FACTORS - JULY 2009

Definitions or meanings of the column headings used in the K, D and T Traffic Factor pdf and spreadsheet files are as follows:

Old Section ID was a former numerical highway section identifier used to reference Traffic Count Stations and accommodate traffic data processing routines through the 2008 calendar year. It is being phased out for 2009 and subsequent years by the following field.

CNTLOCID is a new 6-digit count location identifier that will be used to reference locations where traffic data are collected for 2009 and beyond. This number can be used to view and obtain more detailed information about traffic collected at the Traffic Count Stations displayed in a graphical interface application being developed by the Department.

ROUTE is the alpha-numeric route designation of the highway. Additional descriptive information about this field appears below.

Definitions of Alpha-Numeric Route Designations:

- I is an Interstate Route signed with an Interstate Highway shield
- US is a US Route signed with a US Highway shield
- SR is a State Route signed with a State Highway shield
- The Number is the signed route number of the highway appearing on the shield

The following are Signed Route Qualifiers where:

- A is an Alternate Route
- B is a Business Route
- L Is Loop Route
- S is a Spur Route
- T is a Truck Route
- X is a Temporary Route
- Y is a Wye Leg Route
- (N) indicates the numerical sequence of a discontinuous route. They are usually associated with Interstate Business Loop (B) routes.

BMP stands for beginning milepost. It is the highway milepost location of where the Traffic Count Section begins. BMP locations are stated to the nearest one hundredth of a mile.

START is a literal description of where the Traffic Count Section begins. This beginning point is generally an intersecting road or street, and usually defines the west or south terminus of the section.

EMP stands for ending milepost. It is the highway milepost location of where the Traffic Count Section ends; also expressed to the nearest one hundredth of a mile.

END is a literal description of where the Traffic Count Section ends. Like a start point, the end point is also typically an intersecting road or street, and usually defines the east or north terminus of the section.

K Factor is the 30th highest hourly volume of the year (out of 8,760 possible hours in a calendar year) expressed as a percentage of the AADT volume. K Factors (also known as Design Hour Volumes) are commonly used in highway project assessments and/or design concept reports. They are also needed for calculating key highway congestion and performance indicators, such as Volume-to-Capacity Ratios or Level of Service measurements. K Factors are reported for both 2007 and 2008, where available.

D Factor is the percentage of traffic moving in the peak travel direction during the 30th highest hourly volume of the year. It is calculated by dividing the higher directional volume occurring in the 30th highest hour by the total roadway volume for that hour. D Factors are another basic requirement for development of highway project assessments or design concept reports. They are also used in the derivation of highway congestion measurements. D Factors are reported for both 2007 and 2008, where available.

T Factor is the percentage of the AADT volume generated by trucks or commercial vehicles. Like K and D Factors, T Factors are needed for assessment and advance design of highway projects and in the calculation of congestion or performance measurements. T Factors are reported for both 2007 and 2008, where available.

A further distinction about the presence of trucks in a traffic stream is based on their physical configuration:

Single Trk is the percentage of the AADT volume generated by single-unit commercial vehicles. These are light to medium weight straight-bodied trucks consisting of one motorized unit with six or fewer axles. Examples would include local delivery, dump and garbage trucks. Buses of all kinds are included in these classes of vehicles.

Combo Trk is the percentage of the AADT volume generated by multi-unit or combination commercial vehicles. These are heavy weight trucks with two or more units - typically tractor-trailer combinations such as those used by over-the-road motor freight carriers.

Single and combination truck percentages are reported for 2008 only.

Please note: The K, D and three T measurements defined above are calculated from traffic data gathered at continuous traffic counter stations and/or extended vehicle classification count sessions. Once developed, they are then assigned to other highway segments believed to exhibit similar traffic patterns. A null or blank cell appearing in any of the data fields denotes that the information is currently unknown or unavailable for this location. No estimate has otherwise been made.